For the completion of this project, we were challenged with creating some form of lesson or unit that incorporates the use of technology. At first this very broad concept was difficult to develop into a project plan. Narrowing down all of the possible ideas that could incorporate technology, yet finding something meaningful that my students would connect with was a daunting task. This task, however, is becoming more important as the emphasis being placed on incorporating technology into our day-to-day lessons and planning the broad spectrum of topics and ideas is constantly growing. I can sympathize with the veteran teachers who are hesitant to delve into this new philosophy of teaching. However, as a young teacher, I understand that dedicating my time and energies into creating new and innovative projects and lessons for my students is important. The influence that technology now has on the lives of teens and young adults is an ever growing entity.

After some research, I came across a blog by a fellow math teacher David Wees. His blog included videos from a project that he had conducted with one of his classes. These videos were initially inspired by a project done by Vanderbilt University in 1989, the “Jasper Project.” This what the first time I had been exposed to this video project by Vanderbilt. I was intrigued and thus, conducted some research of my own on this project. What I learned was that it was done by a group of students who wanted to help students to connect with their math lessons. The final project was a compilation of 12 videos. Each video a story of an adventure by a young boy Jasper Woodbury, and in each video there is different mathematical concept that is addressed. The video provides enough information to solve but requires the students to apply mathematical concepts to solve the real-world application of the mathematics. Being in my fifth year teaching, I hear the question, “when am I ever going to use this again?” and this project is an inspired way of addressing that question.

In my final project outline I describe the project. In an effort to ensure that students understand the mathematical concept and the application of such concepts I will be encouraging them to create their own problem which requires right triangle trigonometry to solve. I chose right triangle trigonometry because there are several real-world applications that are quite straightforward; for example land surveyors use right triangle trigonometry on a daily basis. By not providing students with problems to choose from, they are forced to apply a concept and give just enough, but not too much information in order to solve. They will need to understand what the necessary given information would be and what would be easily attained by completing the problem.

In addition to this project forcing students to understand the mathematic basis, it will be a more engaging opportunity for students to connect to the material. Rather than simply reading a problem, and conducting the math the students are engaged in the creation of the problem, the production of the video and ultimately the solving of the problem. Anytime when students get to create a product they become more engaged in the overall work. Technology is a huge facilitator for getting students more engaged and interested in their studies.

Not only does it facilitates engaged learning, but also enhances communication. This project will require students to communicate and once again technology fosters this. There are endless opportunities today to communicate through online learning communities. In prior years it was impossible to communicate with someone in a neighboring state let alone communicate with someone from the other side of the world. As technology has grown, so has our ability to seek news, and communicate with those around us. Today’s students have the opportunity to talk to other students around the world and learn about their cultures first-hand. Teaching in a boarding school I see this occurrence on a regular basis. My students take advantage of what their classmates from around the world have to offer. We have this unique opportunity being in a boarding school. However, students in a traditional public school are not without this opportunity as well. With current social media outlets and video communication such as Skype students can learn about other cultures first hand. Helping to foster and create an informed world.

For all of these reasons and many more technology has become an irreplaceable asset to any classroom. National Education leaders have set forth standards to technology education, just as they have for all content areas. This project, in its design will also help educate students on these standards and help them to understand the importance of digital citizenship. National Education Technology Standards to be incorporated through the completion of the project:

* creativity and innovation-allowing students to not only film and edit a video, but also to write a mathematical problem that can be applied to a real world application
* Communication and collaboration- students will not be able to adequately complete this project without working together. They will be forced to work together to write the problem as well as plan the video and display of solution
* Critical Thinking, Problem solving and Decision making- mathematics on its own promotes all of the following but having this project be open to some interpretation and freedom of choice to plan and create their final product students will be making several decisions to solve the problem at hand.
* Digital Citizenship- Students will have to have an understanding of digital citizenship in order to represent their final product and appropriately cite any sources as well as understand what is appropriate to display for information.
* Technology operations and concepts- Students are being asked to use multiple technology programs to complete their final product.

This project has forced me to step out of my comfort zone and work with programs I have not previously used. After doing this research and setting forth the goals for the students and the expectations, I am quite looking forward to actually having the opportunity to have my students complete the project this spring.

References:

Habash, M. (1998). *Chapter 5: the jasper project*. Retrieved from <http://mmcisaac.faculty.asu.edu/disted/week1/5focusmh.html>

Wees, D. (2009, October 22). *Turning math word problems into math video problems* [Web log message]. Retrieved from <http://davidwees.com/content/turning-math-word-problems-math-video-problems>